Interagency Coordinating Group Meeting Notes

Arizona Department of Water Resources Middle & Upper Verde Conference Rooms April 18, 2007

ICG Members Present:

Mike Crimmins, University of Arizona Cooperative Extension

Alan Croft, Arizona Department of Health Services

Carol Erwin, U. S. Bureau of Reclamation

Charlie Ester, Salt River Project

Tony Haffer, National Weather Service

John Hunt, Arizona Department of Agriculture

Doug Littau, U.S.D.A. Farm Service Agency

Larry Martinez, U.S.D.A. Natural Resources Conservation Service

Chuck McHugh, Arizona Department of Emergency Management

Alan Nulliner, U.S.D.A. Farm Service Agency

Steve Olea, Arizona Corporation Commission

Kirk Rowdabaugh, State Forester, Arizona State Land Department

Bob Sejkora, Arizona State Parks

Chris Smith, U.S. Geological Survey

Karen Smith, Deputy Director, Arizona Department of Water Resources

Mark Weise, Arizona Game and Fish Department

Others:

Perri Benemelis, Statewide Planning, Arizona Department of Water Resources Susan Craig, Statewide Planning, Arizona Department of Water Resources Evelyn Erlandsen, Statewide Planning, Arizona Department of Water Resources Rodney Held, Statewide Planning, Arizona Department of Water Resources Doug Littau, U.S.D.A. Farm Service Agency

Welcome & Introductions

Karen Smith for Herb Guenther(Co-chair), Arizona Department of Water Resources Chuck McHugh (Co-Chair), Arizona Division of Emergency Management

Water Supply Update - Salt & Verde Watersheds

Charlie Ester, Salt River Project (Hand Out- SRP Water Supply and The Drought)

- SRP has been delivering water to the Phoenix area for over 100 years
- Arizona is soon to enter the 13th year of the ongoing drought this summer the drought in Arizona, according to SPR, began in 1995
- Ocean oscillations are what control major droughts in the Southwest
- For the next 20-30 years we may be seeing more drought years than wet years

Where we are

- The 2006 season was the 2nd driest season ever recorded in regards to runoff
- This winter we only received 50% of normal precipitation
- Currently snowmelt is occurring 2-4 weeks earlier in the west
- This year's entire runoff is expected to be 30% of normal; last year's runoff was 16% of normal
- Last year SRP's reservoirs came up by 100,000 acre feet
- This year's overall reservoir storage is 64%, which is up 2% from last year (good position to be in the midst of a drought)
- This year's forecast going into the spring and summer is going to be drier and worse than last year

Water Supply Update - Colorado River Basin

Perri Benemelis, Arizona Department of Water Resources

- The Colorado River is the largest renewable water supply in Arizona
- Half of that water supply comes into the state through Central Arizona Project
- We rely largely on the Upper Colorado River Basin snowpack for water supply on the Colorado River
- At this time, conditions in the Colorado River Basin are dry
- Lake Powell is 48% full; contents are almost 12 million acre feet
- Lake Mead is at 53% capacity for reservoir; contents are 14 million acre feet
- The total system contents for the Colorado River Basin is 56%; 33 million acre feet (similar to where we were last year)

Snowpack

- Snowpack conditions across the Intermountain West are below average or near average, except for east of the Continental Divide in CO, where conditions are above average
- Utah statewide snowpack is 71% of average (up slightly from last month)
- Wyoming snowpack conditions improved over last month; 70-89% of average
- Green River Basin snowpack near the Colorado, Utah, Wyoming border is 70-89% of average, falling from the February 1 estimate of 90-109% of average

State Drought Monitoring Technical Committee Update

Tony Haffer, National Oceanic and Atmospheric Administration

Since the last meeting

- The State Drought Monitoring Technical Committee (MTC) has held monthly meetings to analyze data
- ADWR has been conducting an outreach program that is trying to get local drought impact groups involved to share/report drought impacts
- The University of Arizona is trying to make impact data more easily accessible to the MTC via the internet through the development of the Drought Impact Reporting System

- The MTC has been working to make the drought issue more visible to the media and other outlets taking a proactive approach
- Private citizens are collecting data from their backyard rain gauge and calling in the information so that it can be logged and shared through Rainlog.org

Where we are now

- Snow melt started early this year
- The amount of snowpack received as of April 1, 2007, was less than what was received during this timeframe last year
- There is enough water in Arizona's reservoirs to get us through the summer
- The absolute values of snowpack are going down in low elevation areas, which indicates that there is more rain falling than snow
- In high elevations, data indicates that there is more snow
- We need to pay more attention to groundwater
- We need to find a way to cross-reference data to reflect the conditions in the past and show what to expect in the future
- The MTC would like to re-evaluate the current system used to determine drought status through a drought trigger and indicator system sensitivity analysis
- The MTC recommends that the Interagency Coordinating Group consider re-writing the Drought Emergency Declaration currently in place to reflect the current state of drought and order conservation

Drought Declaration

Susan Craig, Arizona Department of Water Resources

- The ICG meets twice a year and will make a recommendation to the Governor regarding whether to issue or maintain an Emergency Drought Declaration and advise her of any changes in Arizona's drought status
- Susan provided an overview of presentations

Drought Declaration Background

- The current Drought Emergency Declaration was issued in 1999, and has been in effect since
- In 2006, the ICG decided to maintain the Drought Emergency Declaration
- During the last meeting, we discussed the possibility of recommending that a new Drought Declaration be drafted that would focus on preparedness; it would recognize that drought is a persistent state and that we have other plans and tools in place besides the *Arizona Emergency Response and Recovery Plan*

Reasons for a New Drought Declaration

- The 1990 Drought Declaration is outdated, we need a declaration that reflects Arizona's current drought condition
- We need to demonstrate the shift in focus from an emergency response mode to a risk management mode
- Raise public awareness about drought and conservation
- Order action by all Arizonans

Recommended Action by Interagency Coordinating Group

- Recommend to the Governor that a new declaration be drafted to reflect the persistent drought conditions and new tools available to the state (e.g. the *Arizona Drought Preparedness Plan*)
- The new Drought Declaration should represent long-term conditions and address climate change

Local Drought Impact Group Updates

Evelyn Erlandsen, Arizona Department of Water Resources

Background information on the *Arizona Drought Preparedness Plan* (ADPP) and objectives for local drought impact groups was provided. Evelyn also reported that there are nine counties that have established groups or are currently working to create local drought impact groups. The ADPP recommends these groups establish themselves on a voluntary basis to locally monitor and plan for drought. Evelyn also provided background information on how these groups are structuring and how the various committees and workgroups are functioning.

Highlights and Accomplishments

- Cochise County
 - Developed a Local Drought Impact Group Recommended Action plan for various drought status levels
 - o Recently developed an article on climate that they have included in their Back Yards and Beyond Publication
- Pima County
 - Approved a Drought Response and Water Wasting ordinance last June; they are now conducting self audits for all of their various departments to make sure that the county is complying with the ordinance
 - Reviewing the county ordinance to align it with the Arizona Drought Monitor Report
 - o In coordination with the City of Tucson, considering a Drought Stage 1 Alert announcement
 - o Established a drought management site on their county web site
- Santa Cruz County
 - Has a Mitigation Plan that they are considering expanding to include Drought Planning
- Pinal County
 - o In the process of developing a Drought Mitigation and Response Plan (target for their draft is June)
- Yavapai County
 - o Drafted a Drought Mitigation and Response Guideline
 - Has been very instrumental in providing local drought impact data to the Monitoring Technical Committee
- Graham/Greenlee Counties combined into one group and Apache and Navajo Counties are still in the early stages of developing their organizational structures

Drought Impact Data

• A brief overview of drought impact data that Yavapai County provided for February was discussed

- A Drought Impact Reporting System (DIRS) is being developed:
 - Will allow drought reporters to log drought impacts, including economic, aquatic, wildlife, plant and hydrology
 - o Will allow individuals to run reports in a particular region or statewide

County Resource Needs

- There are consistent requests for resources
- Monitoring- there is strong need for training people to use the DIRS
- Education –there is a strong need for funding for educational materials
- Coordinator position there is an interest in finding funding for a group coordinator for each county
- There is a need for support from state and federal agencies to identify funding sources, review the Drought Monitor Report and continuing to work on drought messaging

Priority Resource Needs/Projects

Susan Craig, Arizona Department of Water Resources

Background Information on Drought Planning

- Drought Planning shifts focus from crisis management to risk management
- Emergency response programs are the last resort
- Drought planning is hazard mitigation or any action taken to reduce or eliminate the long term risk to human life or property from natural hazards
- Three main components monitoring, impact and risk assessment/mitigation
- Drought isn't just about the climate, it's the interplay between natural causes and human demand
- Drought planning is more effective than drought response and is usually less expensive than emergency response

Arizona's Drought Planning Efforts

- Implementation of the *Arizona Drought Preparedness Plan* a plan that emphasizes drought planning and preparedness, innovation and action
- Coordination of three structured groups Monitoring Technical Committee, Local Drought Impact Groups and Interagency Coordinating Group
- Drought and conservation planning is required of all community water systems
- State efforts do not attempt to preempt local prerogatives, but rather endeavor to inform, guide, and assist local efforts

2006 Annual Report - Needs Identified

• Susan reviewed the needs identified in the 2006 Arizona Drought Preparedness Annual Report by the Statewide Drought Program, Monitoring Technical Committee, and local drought impact groups

Common/Reoccurring Themes from the 2006 Annual Report

- A greater state investment is needed
- Preparedness and monitoring we need both
- In order to be prepared, we need improved monitoring, forecasting and early warning systems
- The needs identified in the 2006 Annual Report help us get closer to meeting the main goals of the drought preparedness plan (identify impacts to water use sectors, define

sources of drought vulnerability and outline monitoring programs, and prepare drought response options and mitigation strategies)

Priority Resource Needs

- Support local efforts (\$90K); local drought impact group establishment (\$52,500 \$3,500 for each county) and educational materials (\$37,500 \$2,500 for each county)
- Monitoring committee needs (\$363K) listed in order of priority
 - o #1 maintenance of streamflow gage network (\$23K)
 - o #2 drought trigger and indicator system sensitivity analysis (~\$40K)
 - o #3 Improved snow and soil moisture monitoring (\$300K)

Other

- #4 Strategic plan (\$9K)
- #5 Incorporate groundwater data (\$38K)
- #6 Drought impacts database and reporting system (\$?)
- #7 Dynamic drought index decision support web tool (~\$10K)

Comments

- Since some streamflow gages have lost funding from local cooperators, Chuck McHugh suggested that we meet with Arizona's emergency managers at their quarterly meeting to discuss monitoring needs
- Mike Crimmins added that it's important to obtain funding for maintenance of streamflow gages
- Tony Haffer suggested that we present these issues to the state legislators. Karen Smith recommended waiting until the fall just prior to the legislature reconvening
- Chuck McHugh commented that funding may be made available from FEMA (Federal Emergency Management Act) that could assist local efforts or groups
- Susan Craig said that she would be contacting the natural resource agencies to schedule meetings to discuss complimentary missions, investigate funding sources, monitoring data, etc.

Wrap-up and Closing Remarks

Karen Smith, Arizona Department of Water Resources

- Chuck McHughsuggested enlisting speakers for future meetings he recommended that Mimi Diaz, Phoenix Branch Chief for the AZ Geological Society, provide an overview of current Arizona subsidence issues at our fall meeting
- Send Susan comments on the draft Drought Declaration by Friday, April 20th
- ADWR will draft a memo to the Governor with the Interagency Coordinating Group's recommendation to draft a new Drought Declaration